

Proximity and Reduction*

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1. INTRODUCTION: It has been argued in Park (1977a, 1977b, 1980, 1981, and 1982) that proximate repetition of linguistic elements is maximally constrained. It has further been shown that such proximate repetition is usually avoided by means of reduction, which takes the form of either deletion or replacement.

By way of introduction, we will briefly discuss the constraint on proximate repetition (Park (1982)). This constraint says that proximate repetition of identical or nearly identical linguistic elements is maximally avoided because such repetition tends to render the expression in question awkward.

This constraint is capable of providing a highly principled account for a wide range of data such as the following.

- (1) a. *can*+not=*can't* (**cann't*)
- b. *could*+not=*couldn't*
- c. *do*+not=*don't*
- d. *does*+not=*doesn't*
- e. *did*+not=*didn't*

We derive all the negative auxiliary contractions here by attaching the negative contraction *n't* to the auxiliary in question. Note here that the attachment of *n't* to *can*, as in (1a), results in **cann't*, which involves a contiguous repetition of *n* and is hence quite awkward. So as to rid this contraction of its awkwardness, we delete one of the two tokens of *n*, ending up with the form *can't*. Thus the constraint on proximate repetition provides a rather neat account for the apparent anomaly involved in the derivation of *can't*.

The extraordinary explanatory power of our constraint on proximate repetition becomes quite clear when we consider additional supportive data such as the following.

- (2) a. *There is* a lot of snow there.
- b. *There's* a lot of snow there.
- (3) a. *There are* many hotels here.
- b. (?) *There're* many hotels here.

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Note here that *there is* may freely be contracted to *there's* whereas *there are* may not be contracted to *there're* at least with the same degree of impunity. Note further that we may argue here that the contraction *there're* violates our constraint because of the proximate repetition of *re* and is thus better avoided. Needless to say, exactly the same explanation applies to the following data.

- (4) a. *Here's* the pencil.
- b. (?) *Here're* the pencils.
- (5) a. *Where's* the pencil?
- b. (?) *Where're* the pencils?

The constraint on proximate repetition also provides an interesting explanation for the apparent anomaly illustrated by the following data.

- (6) a. That is *his* book. ⇒ That book is *his*. (*That book is *hiss*.)
- b. That is *her* book. ⇒ That book is *hers*.
- c. That is *their* book. ⇒ That book is *theirs*.
- d. That is *your* book. ⇒ That book is *yours*.
- e. That is our book. ⇒ That book is *ours*.

We obtain *hers*, *theirs*, and *ours* in a straightforward manner by adding the suffix *-s* to *her*, *their*, *your*, and *our* respectively. The derivation of the nominal possessive *his* from its adjectival counterpart *his* is slightly more complicated. The addition of the suffix *-s* to the adjectival possessive *his* would give rise to the form **hiss*, which involves a contiguous repetition of *s*. This contiguous repetition of *s* being extremely awkward and inconvenient of articulation and/or perception, one *-s* ends up getting deleted. Thus we get the nominal possessive *his*, which is identical in surface form to its adjectival source *his*. Note incidentally that the theoretically possible **hises* does not occur in English probably because of the awkward proximate repetition of /iz/ here.

It is indeed interesting that reduction due to proximate repetition can also account for such apparent orthographic anomalies as those exemplified by the following words.

- (7) Worcester
- (8) Gloucester

The letter *c* must have had the phonetic value of [s] since it is immediately followed by the letter *e*. The vowel sound represented by this letter *e* may have been reduced to zero because it was the least stressed vowel in the word. This loss of *e* must then have resulted in the juxtaposition of two *s* sounds. This juxtaposition being an articulatory-perceptual monster of sorts, one of the two *s* sounds must have been deleted.

Explainable along similar lines is the replacement of *l* by *r* in (9) below.

- (9) *colonel*

The loss of the second *o* in *colonel*, due to lack of stress, results in the consonant

cluster *ln*. This loss combines with the near loss of the third vowel *e*, again due to lack of stress, to drastically reduce the distance between the two tokens of *l*, resulting in a highly proximate repetition of *l*. We may argue here that this awkward proximate repetition is avoided by replacing the first *l* with *r*. Note that this replacement is not entirely haphazard since *r* happens to be the English consonant that most closely resembles *l*.

Given our constraint on proximate repetition, we can now better understand why English orthography prefers (10a) to (10b).

- (10) a. *reinforce*
 b. *re-enforce/reënforce*

Needless to say, *reinforce* avoids the contiguous repetition of *e* found in *re-enforce/reënforce* and hence is felt to be less awkward. Parenthetically, many feel more comfortable with "*re-record*" than with "*rerecord*" because they think that the former involves a less contiguous repetition of *re* than the latter and is thus less awkward.¹

Note also that our constraint can easily explain why English favors the first item over the second in each of the following pairs.

- (11) a. *unintelligible* vs. **inintelligible*
 b. *most honest* vs. **honestest*
 c. I love *that which* is good. vs. ?I love *that that* is good.

Our discussion has so far focused on the theme that proximate repetition breeds reduction. We will now attempt to demonstrate that not just proximity of repetition but proximity in general conduces to reduction.

2.0. PROXIMITY AS A DETERMINANT OF REDUCTION: Interesting as reduction due to proximate repetition may be, other types of proximity also figure in various intriguing phenomena of reduction. In much of the remainder of this paper, we will discuss a number of these other types of proximity, especially temporal proximity, spatial proximity, psychological proximity, perceptual proximity, and causational proximity.

Virtually all of our examples are from English. This does not, however, mean that what we say in this paper applies only to English. On the contrary, our underlying assumption throughout the paper is that our basic thesis is applicable to all human languages.

¹ Note that the clumsy proximate repetition of (*r*)*e* here is avoided by means of insertion, not by means of reduction. English abounds in examples of insertion helping to avoid such awkward proximate repetition as does this one here (Park (1982)). An interesting case in point is the weak vowel /i/ inserted when we derive "*supposedly*" from "*supposed*", "*markedness*" from "*marked*", etc.

2.1. TEMPORAL PROXIMITY TO THE CONTEXT OF SPEECH: As a general rule, temporal proximity to the context of speech breeds reduction. In other words, the more temporally proximate the reference of an expression is to the context of speech, the more likely it is to get reduced in one way or another.

Incidentally, the vast majority of our speech acts are anchored in (the context of) the present. One interesting consequence of this is that expressions referentially proximate to the present tend to get reduced. We may use the following data to illustrate this point.

- (12) Julius Caesar was assassinated in 44 B.C.
- (13) Emperor Nero was born in A.D. 37.
- (14) Muhammad was born in A.D. 570.
- (15) My father passed away in (*?A.D.) 1950.
- (16) My daughter was born in (*?A.D.) 1970.

The temporal expressions 44 B.C., A.D. 37, and A.D. 570 refer to years very far removed from the present, i.e. from our immediate context of speech. On the other hand, the expressions (*?A.D.) 1950 and (*?A.D.) 1970 refer to years relatively proximate to the present. This difference accounts for the obligatory use of B.C. and A.D. in (12), (13), and (14) above, as opposed to the near obligatory deletion of A.D. in (15) and (16).

Needless to say, one can jokingly say things like "I married my wife in A.D. 1968" or "My son was born in A.D. 1972," deliberately creating the false impression that the persons or events referred to are extremely ancient. One can also use expressions like A.D. 1975 for contrastive purposes, as in (17) below.

- (17) It happened *in* A.D. 1975, *not in* 1975 B.C.

Incidentally, it appears that (in present-day English) only years prior to (A.D.) 1000 require the specification A.D. or B.C., as the case may be. It may very well be the case that the more recent the year in question, the less tolerant it is of the specification. Thus ?A.D. 1492, although slightly awkward, may be far more natural than, say, *?A.D. 1982.

Abbreviations such as the following provide us with further interesting data supportive of our thesis.

- (18) the 1950s \Rightarrow the 50s
- (19) the 1980s \Rightarrow the 80s

Note here that *the 50s*, for one, cannot normally be construed as an abbreviation for *the 1850s* or, for that matter, for *the 2050s*. Needless to say, this difference in abbreviability is a consequence of the difference in temporal proximity to the present, i.e. the immediate context of speech.

Let us now consider the meanings of the abbreviations 'Ought Seven and 'Ten in the

following expressions.

- (20) Howard Jones, A.B. '*Ought Seven*
- (21) William Smith, Ph.D. '*Ten*

Normally interpreted, '*Ought Seven* and '*Ten* here refer to the years 1907 and 1910 respectively. They cannot normally be interpreted as abbreviations for, say, 1707 and 1710 respectively. Again the difference in temporal proximity to the present lies at the root of this difference in abbreviability.

Note at this point that the context of speech may be shifted back to the past, in which case temporal proximity is measured with reference to this backshifted context of speech. For example, in a discussion of the 18th century in Korean history, the context of speech is shifted back to the 18th century. In this backshifted context, *the 1770s*, for one, may freely be abbreviated to *the 70s* since the *1770s* is now maximally proximate to the context of speech.

In this connection, note that a biographer may or may not use the specification *A.D.* in listing the dates for Muhammad the Prophet depending upon the context of speech. If the biographer is one of our contemporaries, the dates would be listed as *A.D. 570-632*. If he was one of the Prophet's contemporaries, however, the same dates would be listed simply as *570-632*. In the latter case, we have a contextual "backshift" of sorts, which is why the dates are given without the specification *A.D.*

Needless to say, the context of speech may also be shifted forward to the future, in which case temporal proximity is measured with reference to this shifted context of speech. Thus in a discussion of the 26th century, for example, the context of speech is shifted forward to the 26th century. In this shifted context, we may freely abbreviate *the 2540s*, for example, to *the 40s* since *the 2540s* is now maximally proximate to the context of speech.

Given our (hypo)thesis that proximity to the present context of speech breeds reduction, we can explain in a principled way why temporal expressions of present relevance often get deleted while those of either past or future relevance usually do not. Let us consider the following data.

- (22) a. May I introduce my (?*present*) wife to you?
- b. May I introduce my *former* wife to you?
- c. May I introduce my *future* wife to you?

(22a) with the parenthesized element *may*, of course, be uttered jokingly. It may not, however, be used in a serious context, except when the intention is to contrast *my present wife* with *my former wife* or *my future wife*. Needless to say, *present* in (22) above gets deleted on account of its maximal proximity to the (present) context of speech while *former* and *future* do not get deleted on account of their distance therefrom.

The following data can be accounted for in exactly the same way.

- (23) a. He is an (?*active*) admiral.
 b. He is a *retired* admiral.
 c. He is a *would-be* admiral.

One might argue here that there is evidence against our (hypo)thesis, saying that such expressions as *former* and *retired* can also be dispensed with if we use the past tense, as in "He *was* an admiral" for "He is a *former* admiral" or "He is a *retired* admiral." Since the use of the past tense here involves a kind of backshifting, however, this does not constitute a genuine counterexample. On the contrary, it merely serves to lend further support to our thesis.

Expressions such as (24) below may also be cited in support of our hypothesis.

(24) *The (X) Administration*

Americans refer to the executive branch of their government as *the (X) Administration*, where *X* is the name of the President and where *X* is normally obligatory only when *X* is not currently in office as President. In fact, *X* is almost always deleted here when *X* is the current occupant of the White House. Note here that the deletability of *X* is tied to its referential proximity to the present (American) context of speech.

Since *Reagan* is currently President of the United States, Americans normally refer to his Administration simply as *the Administration*, rather than as *the Reagan Administration*. On the other hand, they normally refer to Carter's Administration as *the Carter Administration*, not as *the Administration*. This is because Carter is a former President and is thus no longer maximally proximate to the present American context of speech.

Americans can and do speak of their current Administration as *the Reagan Administration*, especially when they need to contrast it with a previous or future American Administration. When talking to a non-American about their current Administration, they may also feel the need to use the expression *the Reagan Administration*. Note that the presence of the foreigner here renders *Reagan* less than maximally proximate to the context of speech.

Let us now compare the following sentences.

- (25) a. I have a good command of (? *present-day*) English.
 b. I have a good command of *Middle* English.
 c. I have a good command of *Old* English.

Note here that *present-day* is almost always superfluous while *Middle* and *Old* are not. Note further that this difference is due to the difference in referential proximity to the (present) context of speech. We might also note in this connection that the following two sentences are redundant if *Middle* and *Old* are not deleted.

- (26) a. *Geoffrey Chaucer* said to his niece, "I like your (**Middle*) English."
 b. *King Alfred* said to his niece, "I like your (**Old*) English."

Middle English and *Old English* are maximally proximate temporally to Geoffrey Chaucer and King Alfred respectively with the result that the qualifications *Middle* and *Old* are redundant and must be left out.²

Structural contrasts such as those illustrated by the following data can also be explained in terms of the difference in temporal proximity to the immediate context of speech.

- (27) a. I saw him (**on the*) *today/yesterday*.
 b. I will see him (**on the*) *today/yesterday*.
 (28) a. I saw him ((*on*) *the*) *day before yesterday*.
 b. I will see him ((*on*) *the*) *day after tomorrow*.

The proximity to the present of *today*, *yesterday*, and *tomorrow* conditions the obligatory deletion of *on the* in (27) above. On the other hand, the (considerable) distance from the present of *day before yesterday* and *day after tomorrow* allows the optional retention of *on the* in (28) (Quirk et al., 1972: 319).

Note in this connection that deictic temporal adverbials generally disallow *at*, *on*, or *in* as their "markers." Thus the following sentences are all unacceptable if they are used with the parenthesized elements.

- (29) a. I saw him (**on*) *last Sunday*.
 b. I will see him (*?*on*) *this evening*.
 c. I will see him (**in*) *next week*.

We may observe here that deictic temporal adverbials are all present-oriented in the sense that they are defined with the present in mind. We might thus argue that they are anchored in the present (context of speech) and that this anchoring in the present accounts for the obligatory deletion of the markers in question.

It is interesting to note here that the temporal adverb *now* is often deleted or at least weakened in pronunciation while similar adverbs of past or future reference are normally not. Thus a Washingtonian would normally say (30a) rather than (30b).

- (30) a. I live in Washington.
 b. I live in Washington *now*.

Needless to say, the near obligatory deletion of *now* here is due to its maximal proximity to the present context of speech. Incidentally, (30b) could, of course, be used

² In fact, *Middle English* would actually be *present-day English* to Chaucer and his contemporaries since the context of speech should be shifted back to their time. Hence, it would be just *English* to them, not *Middle English* or *present-day English*. By the same token, *Old English* would be *present-day English* to King Alfred and his contemporaries so that it would be just *English* to them, not *Old English* or *present-day English*.

mostly for contrastive purposes.

Uttered out of context, (31a) below would normally sound rather odd while (31b) would not.

- (31) a. I *lived* in Washington.
 b. I *lived* in Washington *last year*.

(31a) would sound odd because it is semantically incomplete in the sense that it leaves the time of residence unspecified. In fact, (31a) is likely to elicit from the addressee a question as to the time of residence, such as "*When was that?*" or "*When did you live there?*" Thus we see that temporal adverbials of past reference may not be freely left out because of their less than maximal proximity to the present context of speech.

Similarly, (32a) would normally sound slightly odd, out of context, while (32b) would not.

- (32) a. I *will live* in Washington.
 b. I *will live* in Washington next year.

The slight oddness of (32a) can also be explained along the lines of (31a). In fact, (32a) is also likely to elicit from the addressee a question as to the time of intended residence, such as "*When?*" or "*When will that be?*"

The need to delete reference to the immediate present appears to lie at the root of the oddness of (33a) below while the need to make specific reference to a non-present time makes (33b) perfectly natural.

- (33) a. *? *When does* he live? (live= (continue to) be alive)
 b. *When did* he live?

We can also explain why, under normal circumstances, nuclear stress falls on the sentence-final temporal adverb in (34a) below while it does not in (34b).

- (34) a. It was cold *yesterday*.
 b. It is cold *today*.

The adverb *today* is so proximate referentially to the immediate context of speech that it may very well be deleted. Thus even when it is retained, it is so weakened in pronunciation that it fails to receive nuclear stress. On the other hand, *yesterday* is (a little) removed from the immediate context of speech with the result that it is neither deletable nor reducible in pronunciation.

Needless to say, *today* can receive nuclear stress when it is contrasted with some other day. Thus "*It is cold today*" with nuclear stress on the second syllable of *today* has a different semantic interpretation than does (34b). This *today* may not be deleted or reduced in pronunciation because of its "heavy" semantic content.

We can also provide a principled explanation for the apparently idiosyncratic behavior

of the verb *be* with respect to reduction. Let us examine the following data.

- (35) a. *He is* my partner. \Rightarrow *He's* my partner.
 b. *He was* my partner. \Rightarrow ?
 (36) a. *I am* your partner. \Rightarrow *I'm* your partner.
 b. *I was* your partner. \Rightarrow ?
 (37) a. *You are* my partner. \Rightarrow *You're* my partner.
 b. *You were* my partner. \Rightarrow ?

The verb *be* shortens and attaches to the subject (pro)noun, forming such contractions as *He's*, *I'm*, *You're*, etc., when it is in the present tense, but not when it is in the past tense. This contrast may be attributed to the difference between the present and the past tense in temporal proximity to the immediate context of speech.

Explainable along similar lines is the behavior of the verb *be* with respect to deletion in informal, colloquial English, as shown in the following data.

- (38) a. Where *are* you going? \Rightarrow Where you going?
 b. Where *were* you going? \Rightarrow (?) Where you going?

Note that the present tense form *are* gets deleted here while the past tense form *were* does not get so readily deleted. Note further that the auxiliary *do* in informal yes-no questions is more likely to be deleted in its present-tense forms *do* and *does* than in its past-tense form *did*. Note here also that verbs in general are shorter in their present-tense form than in their non-present form in all human languages. This difference in length may also be ascribed to the difference in temporal proximity to the present (context of speech).

2.2. SPATIAL PROXIMITY TO THE CONTEXT OF SPEECH: Not only temporal proximity to the context of speech but also spatial proximity thereto breeds reduction. The rule here may be formulated roughly as: "The more spatially proximate the reference of an expression is to the context of speech, the more likely it is to be reduced in one way or another."

We may begin our discussion here by noting that a Washingtonian addressing a fellow Washingtonian on a Washington street on an unseasonably cold morning would normally say (39a) below, not (39b).

- (39) a. It's very cold this morning.
 b. It's very cold *in Washington, D.C.* this morning.

Both interlocutors are in Washington, D.C. itself so that *Washington, D.C.* is maximally proximate spatially to the immediate context of speech. Thus the mention of Washington, D.C. in this context is simply superfluous and is normally deleted. A sentence like (39b), which specifically mentions Washington, D.C., may, of course, be used when Washington, D.C. is contrasted with some other place.

The same two Washingtonians, speaking in Washington, D.C. of the weather in Moscow, would normally say (40b) rather than (40a).

- (40) a. It's very cold this morning.
b. It's very cold *in Moscow* this morning.

Note here that Moscow is not proximate to the immediate context of speech with the result that its mention in the form of *in Moscow* may not be omitted. Note further that the same two Washingtonians, speaking outside Washington, D.C. of the weather in their home town, are apt to say not (39a) but (39b) or its equivalent such as (41) below.

- (41) It's awful cold *back in D.C.*

Needless to say, the mention of Washington, D.C. in one way or another is necessary in this context because it is no longer maximally proximate to the immediate context of speech.

The notion of spatial proximity can also be invoked to explain why exophoric pronouns such as *I*, *you*, and *we* do not have intralinguistic antecedents. *I*, *you*, and *we* as well as the exophoric *he*, *she*, and *they* are antecedentless because their referents are already in the immediate context of speech so that their prior mention in the form of their antecedents is not necessary.

Another interesting case of spatial (as well as temporal) proximity breeding reduction is afforded by performative deletion (Park (1977a), (1980), (1981), and (1982)). The elements affected by performative deletion are all tied, either spatially or temporally, to the immediate context of speech so that their mention is superfluous. Seen in this light, performative deletion, which comprises the deletion of *I*, *you*, *here*, *now*, and the performative verb in question, is merely a case of proximity-conditioned reduction.

We may also note in this connection that the optional deletion of "performative clauses" in sentences such as the following is amenable to a similar explanation.

- (42) It is interesting ((*for us*) *to note*) that he is a liberal.
(43) I regret (*to inform you*) that she is seriously ill.
(44) I am sorry (*to tell you*) that I cannot go with you.

Also explainable in terms of spatial proximity to the immediate context of speech is the (optional) deletion of *for*-phrases such as those parenthesized in the following sentences.

- (45) He said (*for me*) to stay home.
(46) You said (*for us*) to be quiet.
(47) I said (*for you*) to behave.

Note here that *me*, *us*, and *you* have their referents in the immediate context of speech so that their mention is superfluous. Needless to say, the deletability of *to us all*

in "*It is obvious (to us all) that he is guilty of the crime*" can be accounted for in exactly the same way. Suppose a third-person pronoun were used here instead of a first-person or a second-person pronoun. Unless the third-person pronoun is exophoric, the *for*-phrase is not deletable. For its referent is outside the immediate context of speech and thus not maximally proximate thereto.

The overwhelming majority of deletions, typical of informal colloquial English, can be rationalized in a similar manner. Let us take for example the following pairs of sentences, in each of which the second sentence is a shortened informal version of the first.

- (48) a. *Do you want a drink?*
b. A drink?
- (49) a. *I wish you good luck!*
b. Good luck!
- (50) a. *I thank you!*
b. Thank you/Thanks!
- (51) a. *I beg your pardon.*
b. Beg your pardon/Pardon.

The deletions observable here are all quasi-performative, in a manner of speaking. Needless to say, all the elements deleted here are bound to the immediate context of speech in such a way that linguistic reference thereto is almost redundant.

Directions and instructions often involve reductions conditioned by spatial proximity. The following expressions provide us with a few cases in point.

- (52) Fill her up ((?)*with gas*).
- (53) Dispose of ((?) *the can*) properly.
- (54) Twist ((?) *the cap*) off.

All these expressions minus the parenthesized parts are expressions in common use in the United States. "*Fill her up*" is the expression one uses when asking a gas station attendant to fill one's car up with gas(oline). Note here that gas is so proximate to the immediate context of speech, i.e. the gas station, that no mention of gas is called for. Thus "*Fill her up with gas*" would normally sound odd in this context whereas "*Fill her up*" sounds perfectly natural.

"*Dispose of properly*", found on Coca Cola cans, means that one is to dispose of the can properly after drinking its content. Note here that this direction is on the can in question, i.e. in the immediate context of speech, with the result that the can need not be mentioned.

"*Twist off*" is found on some beer-bottle caps and means that one is to take off the cap in question by twisting it. The point here is that this direction is on the cap itself, i.e. in the immediate context of speech, so that its mention is not necessary and hence

omitted.³

The concept of spatial proximity appears to be capable of throwing considerable light on the formation of many adverbial particles. An adverbial particle is often a remnant of a prepositional phrase and is formed by deleting the complement of the preposition when its referent is maximally proximate spatially to the immediate context of speech. Let us consider the following pair of sentences.

- (55) a. Shall we *walk across the street* now?
 b. Shall we *walk across* now?

A pedestrian, speaking to another pedestrian on one side of a street, would normally say (55b) rather than (55a). Needless to say, *the street* here is maximally proximate to the context of speech so that its mention is not necessary and hence better left out.

Note here that we can now provide a highly principled account for the derivation of such sentences as "Is he *around*?" and "Is he *in*?" from their source sentences "Is he *around here/there*?" and "Is he *in the house/office*?" Note in this connection that a passenger on a bus may ask the driver to tell him where to get off the bus, using (56b) rather than (56a).

- (56) a. Could you tell me where to get *off the bus*?
 b. Could you tell me where to get *off*?

Needless to say, *the bus* is almost superfluous and hence dispensable because it is maximally proximate to the context of speech.

Spatial proximity as a determinant of reduction plays a role in the semantic interpretation or contextual disambiguation of sentences such as the following.

- (57) They live on *the mainland*.

To a Hawaiian in Honolulu, for example, (57) is usually short for "They live on *the U.S. mainland*." To a Chinese in Taipei, on the other hand, it is normally short for "They live on *the Chinese mainland*." Note here that spatial proximity accounts for the deletion of the nationality adjectives *U.S.* and *Chinese* here. These adjectives, if retained, would render the sentence in question redundant and thus awkward. Thus a Chinese in Taipei is not likely to say something like *the Chinese mainland* except for contrastive purposes. By the same token, an American in Honolulu is not likely to say something like *the U.S. mainland* except for contrastive purposes.

PSYCHOLOGICAL PROXIMITY may also have to be taken into consideration here. Korea is quite proximate spatially to the Chinese mainland, but Koreans do not delete the adjective *Chinese* when they refer to *the Chinese mainland*. This may be due to lack of

³ This kind of reduction due to spatial proximity abounds in much of what some grammarians call block language (Quirk et al., 1972: 414-415).

psychological proximity between Koreans and the Chinese mainland.

Note in this connection that, although the United States is not proximate spatially to Europe at all, Americans often refer to *the European Continent* as *the Continent*. Here again the notion of psychological proximity has to be invoked if we are to provide an adequate account for the deletion of the adjective *European*.

Recall our earlier reference to the American practice of referring to *the current American administration* as *the Administration* without mentioning the name of the (current) President. Thus Americans refer to *the Reagan Administration* simply as *the Administration*, Reagan being the current occupant of the White House. On the other hand, non-Americans, especially those outside the United States, are likely to refer to *the Reagan Administration* as *the Reagan Administration*. This difference seems to be due to the obvious difference in spatio-psychological proximity.

Needless to say, exactly the same explanation applies to the fact that Koreans in Korea normally refer to their government as *the Government* while non-Koreans, especially those outside Korea, normally refer to the same government as *the Korean Government*. It is probably no coincidence that abbreviations tend to be used by those who feel spatio-psychological affinity to their referents. Thus *Georgetown University*, for one, is often just *GU* to its staff, faculty, students, and alumni.

The use of abbreviated first names such as *Liz* for *Elizabeth* and *Ron* for *Ronald* can be explained along similar lines. So can such abbreviated common nouns as *Doc* for *Doctor*, *Hon* for *Honey*, *Sis* for *Sister*, and *Sarge* for *Sergeant*.

It is interesting to note at this point that polite language tends to be longer than familiar language in all human languages. This difference in length may be explained as arising from a difference in socio-psychological proximity. Note here that polite language presupposes a longer socio-psychological distance between the interlocutors than does familiar language.

The notion of spatio-psychological proximity is also instrumental in accounting for the generally observed fact that informal, spoken language tends to be shorter than formal, written language. Our explanation would consist in saying that informal, spoken language is tied far more closely to the immediate context of speech than its formal, written counterpart is. For one thing, the former involves face-to-face communication between the interlocutors while the latter usually does not. Thus informal, spoken language is more tolerant of reduction than formal, written language is.

Note in this connection that direct speech is often shorter than indirect speech, as is shown in the following pairs of sentences.

- (58) a. He said, "I like music."
 b. He said *that* he liked music.
- (59) a. He said, "Is John in?"
 b. He asked *whether* John was in.

The non-use or "deletion" of such connectives as *that* and *whether* makes direct-speech forms shorter than their indirect-speech counterparts. This may have to do at least in part with the fact that direct speech is more deeply embedded in the immediate context of speech than indirect speech is.

Note in this connection that, in addressing a friend by the name of *John*, we may use either *John* or *Dear John* depending upon the context. The vocative takes the form of *John* when we address John in a face-to-face situation while it takes the form of *Dear John* when we address him in a letter. Note here that the vocative in question takes a shorter form when its referent is in the immediate context of speech, i.e. in a face-to-face situation. Note also that vocative nominals are not normally used with determiners, including articles. This arguably is another case of spatio-psychological proximity breeding reduction.

Just as temporal adverbs of present relevance tend to get reduced or weakened, spatial adverbs of present relevance also tend to get reduced or weakened. Thus under normal conditions the proximal adverb *here* does not receive nuclear stress in sentences such as (60) below.

(60) I wórk *here*.

Normally nuclear stress falls on *work* in this sentence. Needless to say, *here* is only weakly stressed here because it is maximally proximate to the immediate context of speech so that it carries little information of significance.

Note in this connection that (61) below, used in asking over the telephone if John is in, gets its nuclear stress not on the distal adverb *there* but on *John*.

(61) Is Jóhn *there*?

In this context, *there* does not get nuclear stress because it is so proximate to the immediate context of (telephone) speech that it contains little information of value to the addressee. For exactly the same reason, *home* and *in* in the following sentences do not normally get nuclear stress, especially in the context of a telephone conversation.

(62) Is Jóhn *home*?

(63) Is Jóhn *in*?

It goes without saying that the spatial adverbs *here*, *there*, *home*, and *in* in (60) through (63) can get nuclear stress in a contrastive context.

2.3. PROXIMITY TO THE NORM: The rule governing proximity to the norm as a determinant of reduction may be roughly stated thus: "The closer to the norm the referent of an expression is, the more reduced, i.e. the shorter, the expression tends to be."

As our first example, let us consider the following set of sentences.

- (64) a. A (*?*legged*) boy came to see you.
 b. A *legless* boy came to see you.
 c. A *short-legged* boy came to see you.

(64a) is unnatural because leggedness is a normal human condition with the result that reference thereto is superfluous. On the other hand, leglessness is the exact opposite of the normal human condition of leggedness so that reference thereto, as in (64b), is not superfluous at all. Short-leggedness is also a condition more or less removed from the normal length of human legs so that reference thereto, as in (64c), is perfectly natural. In this way, our concept of proximity to the norm neatly explains why the adjective *legged* in the first sentence above must be deleted while the other adjectives *legless* and *short-legged* may not be freely deleted.

A similar account is possible for the following pair of sentences.

- (65) a. I want to attend a school (*?*for the sighted*).
 b. I want to attend a school *for the blind*.

Schools are normally for the sighted so that the qualification *for the sighted*, as in (65a), generally is superfluous and gets deleted. On the other hand, schools for the blind are an entirely different matter because they are anything but normal. Hence the qualification *for the blind* is not superfluous at all and is thus better retained.

Note at this point that the point of view may be shifted here with a dramatic reversal in the acceptability of the sentences in question. Thus from the point of view of the blind, (65a) with the parenthesized *for the sighted* could sound perfectly natural because schools for the sighted are far removed from their own norm, i.e. schools for the blind. A school for the blind now being maximally proximate to the shifted norm, i.e. their own norm, the blind may refer to it simply as *a school* without the qualification *for the blind*. In fact, the expression *school for the blind* may sound less than natural to the blind.

Given our concept of proximity to the norm, we can also account for the following data in a highly principled manner.

- (66) a. The University of Hawaii has a department of English (*?*as a native/first language*).
 b. The University of Hawaii has a department of English *as a foreign/second language*.

Needless to say, English as a native/first language is the norm in the United States whereas English as a foreign/second language is not. Thus an American university may have a department of English or a department of English as a foreign/second language, but not a department of English as a native/first language. The point here is that the specification *as a native/first language* is obligatorily deleted here because teaching English as

such is the norm in the United States.

Our concept of proximity to the norm also enables us to offer a rather interesting account for the American English usage illustrated by the following data.

- (67) a. He is a *German-American*.
 b. He is a *Polish-American*.
 c. He is a *Korean-American*.
 d. He is an (?*English-*) *American*.

Note here that Americans of English extraction constitute the norm in the United States while Americans of non-English origin are more or less removed from this norm. Thus Americans of English ancestry are referred to in the United States simply as *Americans* without the ethnic/national specification *English* while other Americans are referred to as *German-Americans*, *Polish-Americans*, *Korean-Americans*, etc. The important thing is that *English* gets deleted here on account of its maximal proximity to the American ethnic norm while other ethnic adjectives usually do not because of their distance from this norm.

The concept of proximity to the norm is also instrumental in explaining the following data.

- (68) a. I met *her boy friend* here.
 b. I met *her* ((?)*girl*) *friend* here.
 (69) a. I met *his* ((?)*boy*) *friend* here.
 b. I met *his girl friend* here.

Since it is closer to the norm for friends to agree in sex than to disagree therein, the parenthesized gender markers here are normally superfluous and hence omitted. Times are changing rather breathlessly, but what we have said here appears to be still valid for most of us. We may note in passing here that *her girl friend* and *his boy friend* may sound perfectly natural in gay parlance (or in a contrastive context).

Our concept of proximity to the norm also throws light on the English usage illustrated by the following data.

- (70) a. A (*?*female*) *prostitute* was arrested.
 b. A *male prostitute* was arrested.

As is well known, the world's oldest profession is confined almost exclusively to the fair sex with the result that a female prostitute is maximally proximate to the professional norm here while a male prostitute is not. Thus *female* is superfluous in (70a) above and is hence better left out while *male* is not superfluous in (70b) and is hence better retained.

It is worth noting in this connection that unmarked forms tend to be shorter than their marked counterparts in all languages. For example, masculine and singular forms are generally shorter than their feminine and plural counterparts. This is because in our terms unmarked forms are more proximate to the norm than marked ones are.

2.4. PROXIMITY BETWEEN REFERENTS: Proximity between referents also breeds reduction. The rule here may be stated thus: "The more referentially proximate two expressions are to each other, the more likely it is for the second one (or both) to get reduced."

As our first example, let us consider the following pair of sentences.

- (71) a. *He* kept *me* from smoking too much.
 b. *He* kept ((?)*himself*) from smoking too much.

(71b) is much more natural without the parenthesized *himself* than with it because of the maximal interreferential proximity between *He* and *himself*. On the other hand, *me* may not be deleted from (71a) because of its referential distance from *He*.

The phenomenon of object deletion found in data such as the following can be accounted for in exactly the same way.

- (72) a. *I* put *him* up for the weekend.
 b. *I* put (?!*myself*) up at the hotel for the night.
 (73) a. *We* got *her* up at once.
 b. *We* got (?!*ourselves*) up at once.
 (74) a. *They* kept *the dog* off the grass.
 b. *They* kept (?!*themselves*) off the grass.
 (75) a. *They* settled *the refugees* in California.
 b. *They* settled (?!*themselves*) in California.
 (76) a. *The truck* was then pulling *a trailer* out.
 b. *The truck* was then pulling (?!*itself*) out.
 (77) a. *She* managed to pull *me* through.
 b. *She* managed to pull (?!*herself*) through.

These examples throw considerable light on how inherently transitive verbs, such as those used here, get intransitivized.

Note the interesting fact that the logical object in the following sentence may not have an overtly manifested surface form in American English.

- (78) *He* always keeps (?!*himself*) to *himself*.

This sentence with the parenthesized *himself* is a stylistic monster, at least in American English. Note here that the parenthesized *himself* agrees with the subject in reference. Note further that it agrees with the complement of the preposition *to* both in form and in reference. Thus (78) with the parenthesized *himself* violates the constraint on proximate repetition at least on two counts and is, for that reason, an extremely awkward sentence. We must delete this troublesome *himself* if we are to make the sentence tolerable.

Interreferential proximity is also responsible for the optional deletion of the parenthesized portions in the following data.

- (79) a. *You got me a deal.*
 b. *You got (yourself) a deal.*
- (80) a. *I bought her a car.*
 b. *I bought (myself) a car.*
- (81) a. *I went to his home.*
 b. *I went (to my) home.*

Here again the parenthesized portions may be deleted when they are coreferential with the subject, i.e. maximally proximate referentially to the subject.⁴ Note incidentally that "*I went to my house*" does not shorten to "**I went ϕ house.*" The reason here may be that *house* is not as proximate to our psyche as *home* is.

A different type of interreferential proximity is also responsible for reduction. Of the two elements in this type of interreferential proximity, one is closely related or tied to the other, but not a copy of the other. The following data may be used to illustrate this type of interreferential proximity.

- (82) a. *She is with a child.*
 b. *She is with ϕ child.*

Note here that a closer relation between *she* and *child* is implied in (82b) than in (82a). Note further that this closer relation, i.e. a higher degree of interreferential proximity, is responsible for the deletion of the article in (82b), as opposed to its use in (82a).

Similarly accountable for are sentences such as the following, which abound in English.

- (83) a. *They sent him to the jail.*
 b. *They sent him to ϕ jail.*
- (84) a. *Eden went to the school.*
 b. *Eden went to ϕ school.*

Note that the interreferential relation between *office* and *president* is normally closer in (85b) below than in (85a).

- (85) a. *The Office of the President*
 b. *The Office of ϕ President*

The closer relation in (85b) is expressed by the deletion or non-use of the article,

⁴ Note that the derivation of "*He put his pants on*" and "*He took his pants off*" from "*He put his pants on himself*" and "*He took his pants off himself*" respectively appear to involve reduction due to interreferential proximity, i.e. between *He*, *his*, and *himself*. However, the derivability of "*He took her pants off*", for one, from "*He took her pants off X*," where X can refer to anybody in the immediate context of speech, appears to indicate that the reduction in question is due to spatial proximity. Incidentally, it may turn out to be the case that interreferential proximity is merely a special case of spatial proximity.

as opposed to its use in (85a). Note in this connection that *a candidate for ϕ mayor* implies a much closer relation between *candidate* and *mayor* than does *a candidate for the mayor*. *A candidate for ϕ mayor* aspires to become mayor himself whereas *a candidate for the mayor* is only running for office on behalf of the mayor.

As is shown quite clearly in (82) through (85), the deletion or non-use of the article often serves to signal a closer interreferential tie. In this connection, let us also consider the following sentence.

(86) I now pronounce you ϕ *man and ϕ wife*.

Note here that *man and wife* implies a very close relation between the persons in question as a married couple, which is why we may not use the article before either *man* or *wife*. Note further that "*I now pronounce you a man and a wife*" cannot simply convey the closeness of relation between the two persons here as well as (86) does. We steer clear of the article not just in *man and wife* but also in many other parallel constructions, e.g. *hand in hand*, in order to express maximal interreferential proximity between the two nouns in question.

Note at this point that *bread and butter* may refer to one and the same thing or two different things, the interreferential proximity being greater in the former case than in the latter. Note further that the conjunction *and* is likely to be reduced in pronunciation to a much greater extent when the two conjoins refer to one and the same thing than when they refer to two different things. Needless to say, many similar coordinate expressions such as *stars and stripes* behave in exactly the same way with respect to the pronunciation of *and*.

When there is *complete* interreferential proximity between the two "conjoins", as in apposition, the conjunction *and* may not be used at all. Thus (87b) refers to one and the same person while (87a) refers to two different persons.

- (87) a. John *and* the Baptist
- b. John ϕ the Baptist

Note here that our concept of interreferential proximity makes possible a rational explanation for the "deletion" or non-use of the conjunction *and* in appositive phrases such as (87b), as opposed to its use in coordinate phrases such as (87a).

Note that we can also explain quite rationally the deletion phenomenon illustrated by the following data.

- (88) a. Did you go there, and *did you* talk to him?
- b. Did you go there and ϕ talk to him?

(88a) normally refers to two separate events, each conjoin referring to one of the two events. On the other hand, (88b) refers to one and the same event with the first

conjoin referring to something leading up to what the second conjoin refers to. Thus we see that the two conjoins are referentially linked to each other much more closely in (88b) than in (88a), which is why the second token of *did you* gets deleted in (88b) while it does not in (88a).

2.5. PERCEPTUAL PROXIMITY: Perceptual proximity or immediacy is often responsible for reduction. Our rule here may be stated roughly as: "The more proximate or immediate the perception referred to is, the more reduced the expression tends to be."

As our first example, let us consider the following data.

- (89) a. She *seems* (to be) worried.
- b. She *appears* (to be) worried.
- c. She *looks* (*to be) worried.

Note here that *look* is a verb of much more immediate or proximate perception than is either *seem* or *appear* so that the immediacy or proximity of perception is much greater with *look* than with either *seem* or *appear*. This difference accounts for the non-use or deletion of the complementizer *to be* in (89c), as opposed to its 'optional' deletion in the other two sentences.⁵

Note in this connection that verbs of maximally immediate perception may not be used with the complementizer *to be*. Thus the following sentences would all be ungrammatical if we used them with the parenthesized *to be* undeleted.

- (90) This orange *tastes* (*to be) good.
- (91) This orange *smells* (*to be) good.
- (92) This orange *feels* (*to be) good.

It is interesting that the deletion of the complementizer *to be* is optional with verbs of less immediate perception, as is shown by the following data.

- (93) He is *considered* (to be) a brave man.
- (94) He is *thought* (to be) quite intelligent.
- (95) This service is *deemed* (to be) essential.
- (96) I *find* it (to be) interesting.

Incidentally the complementizer *to be* here may not be a complete semantic zero and if so, not really optional. It may very well be the case that the immediacy of perception expressed is greater when the complementizer is not used than when it is used. This could prove to be an interesting research topic for the future.

⁵ Where *to (be)* may or may not be used, its use may often serve to signal a weakened immediacy of perception. If this is indeed true, then *to (be)* may not be a complete semantic dummy at all. In fact, there is reason to believe that this may actually be the case, as will become evident in the next couple of pages.

Note at this point that grammarians have long been aware of the so-called bare infinitive in sentences such as the following, where it is part of the verbal complement.

- (97) I *saw* them (**to*) leave.
- (98) I *heard* them (**to*) quarrel.
- (99) I *felt* something (**to*) crawl on my face.
- (100) They *watched* me (**to*) kick the ball.
- (101) *Look* at them (**to*) run.
- (102) *Listen* to him (**to*) yell.
- (103) I never *observed* him (**to*) do otherwise.

Note that all the main verbs here are verbs of maximally immediate perception and that the infinitive marker *to* has to be deleted if we are to render the structure more compliant with the perceptual immediacy implied by these main verbs.⁶

It is interesting that the infinitive marker *to* comes back to life in the passive versions of sentences such as (97) through (103). Let us consider the following examples.

- (104) They *were seen to* leave.
- (105) They *were heard to* quarrel.
- (106) He *was* never *observed to* do otherwise.

The use of *to* here may have a purpose to serve and, if so, it is not a semantic zero. The perceptual immediacy inherent in the main verb here may very well be weakened in the process of passivization so that it may be necessary to use *to* to indicate this weakened immediacy of perception.⁷

Our concept of perceptual immediacy may also be instrumental in explaining the article usage illustrated by the following data.

- (107) a. I *listen to the radio* every night.
- b. I *watch* (**?the*) *television* every night.

Although both *listen* and *watch* are verbs of immediate perception, they differ in the degree of immediacy with *watch* involving a higher degree of immediacy than *listen* does. For the visual modality is more immediate to us than is the auditory modality. This difference may be responsible at least in part for the deletion/non-use of the article in (107b),

⁶ As a general rule, sensory perception is more immediate than cognitive perception. This may be why *to (be)* is deleted obligatorily in (89c), (90)–(92), and (97)–(103), whereas it is optional in (93)–(96).

⁷ Consider here the difference in meaning between “*She fell ϕ dead*” and “*She fell to her death*.” “*She fell ϕ dead*” implies much less of a spatio-temporal gap between the beginning of her fall and her death than “*She fell to her death*” does. If this is correct, we may say that *to her* here is functionally similar to *to* in (104) through (106) in that they both serve to express a weakened immediacy.

as opposed to its use in (107a).⁸

Note in this connection that one normally identifies oneself by saying "I am so and so" (or "My name is so and so") in a face-to-face situation, as in the case of a TV newscaster, and by saying "*This* is so and so" in a situation where one, i.e. the speaker, is not visible to his audience, as in the case of a radio announcer. Note here that *I*, a pronoun of maximally direct reference, is used in a situation of maximally immediate perception while *this*, a pronoun of less direct reference, is used in a situation of less immediate perception. It is interesting that our concept of perceptual immediacy makes possible a very sensible account for the observed difference in referential directness here.⁹

2.6. CAUSATIONAL PROXIMITY: Just as verbs of perception can differ from each other in the degree of perceptual proximity or immediacy, verbs of causation can also differ from each other in the degree of causational proximity or immediacy. For example, *make* is a verb of far greater causational immediacy than *cause* is. This difference in causational immediacy is very clearly reflected in the structure of the complements that these verbs command. As our first example, let us consider the following data with special reference to the deletability of the complementizer *to be*.

- (108) a. We made him ((*?to) ?be) happy.
b. We caused him *to be* happy.

The reason for the disallowance of *to be* in the first sentence above is that *make* is a verb of such immediate causation that *to be*, if used, would be in conflict with the immediacy implied by the verb. On the other hand, *cause* is a verb of far less immediate causation so that *to be* is obligatory as a marker of this less than maximally immediate causation.

Interestingly enough, the complementizer *to* comes back to life when a *make*-causative sentence is passivized. Let us compare the following two sentences.

- (109) a. They *made* him (*?to) work in the basement.
b. He *was made to* work in the basement.

The obligatory use of *to* in (109b) above may be due to a potential weakening of causational immediacy that might take place in the process of passivization. If this turns out to be the case, which seems quite plausible, then the complementizer here might not be a complete semantic zero. In fact, no linguistic element can be entirely empty of meaning. Otherwise, it would have no reason for being.

Note here that *to* occurs as part of the complement of *make* in the proverb "Money

⁸ Note that the article comes back to life in "Turn on/off/up/down the television," where what is at the center of attention is not the visual modality but the auditory modality or the television set.

⁹ This usage of *I* vs. *this* could just as well be treated under spatial or spatio-psychological proximity. This may mean that the line of demarcation between perceptual proximity and spatial/spatio-psychological proximity is a very thin one.

makes the mare *to* go." We might speculate here that *to* in this apparent counterexample serves at least in part to indicate a causational immediacy which is less than maximal. In support of this speculation, we might cite the fact that mares do not understand the value of money and so money cannot really induce a mare to go, not in any direct way at least. This, together with the frequently cited rhythmic consideration, may have kept *to* here from being deleted.

Let us now consider the following two sentences with special reference to their verbal complements.

- (110) a. Could you *get* him *to* come?
 b. Could you *have* him (*?*to*) come?

It appears that *have* is a verb of greater causational immediacy than *get* is. If this is actually the case, then this difference in the immediacy of causation between the two verbs here may be responsible for the use of *to* in (110a) and its non-use or deletion in (110b).

The use versus non-use of *to* in the following pair of sentences can also be accounted for in a similar manner.

- (111) a. The monk *helped* me *to* find my way home.
 b. The monk *helped* me ϕ find my way home.

Many people find no difference in meaning between these two sentences. Some people do distinguish between the two, however, with their distinction centering around the second sentence being expressive of greater causational immediacy than the first. Under this latter interpretation, the zero complementizer is indicative of a higher degree of causational immediacy than the complementizer *to*.

Note in this connection that the immediacy of causation implied by *help* may also be weakened in the process of passivization so that the complementizer *to* is obligatory with a passivized *help*, as is shown by the following data.

- (112) a. I *was helped to* find my way home.
 b. *?I *was helped* ϕ find my way home.

If what we have just said is true, then the complementizer *to* is far from being a semantic blank. On the contrary, it is a marker of weak(ened) causative force.

We may note in passing here that *kill*, *make die*, and *cause to die* differ in causative force, the immediacy of causation increasing in inverse proportion to the length of the expression in question. This is exactly what would be predicted by our hypothesis concerning causational immediacy as a determinant of reduction. Note incidentally that *kill* may not be "transformationally" derived from either *make die* or *cause to die* since it differs from them semantically, i.e. with respect to the immediacy of causation.

Let us now compare the following three sentences with special reference to their verbal complements.

- (113) a. I *made* him ϕ ϕ a happy man.
 b. I *let* him ϕ *be* a happy man.
 c. I *caused* him *to be* a happy man.

Note here that *let* ranks between *make* and *cause* in causative immediacy. Note further that the length of the verbal complement is again in inverse proportion to the immediacy of causation implied by the verb, which is precisely what would be predicted by our hypothesis concerning causational immediacy.

It is interesting to note at this point that the following two sentences can differ slightly in meaning.

- (114) a. They *shot* her *to death*.
 b. They *shot* her ϕ *dead*.

(114b) implies that her death was (almost) instantaneous while (114a) does not necessarily have this implication. In fact, (114a) can imply some time gap between their shooting and her death. In other words, (114b) can imply a more immediate causation of death than (114a) does. Hence (114b) has a shorter complement than (114a), which is the way it should be according to our hypothesis.

We can now offer a fairly principled account for data such as the following.

- (115) a. They *starved* him *to death*.
 b. *?They *starved* him ϕ *dead*.
 (116) a. He *drank* himself *to death*.
 b. *?He *drank* himself ϕ *dead*.
 (117) a. She *smoked* herself *to death*.
 b. *?She *smoked* herself ϕ *dead*.

Note here that *starve*, *drink*, and *smoke* normally are verbs of gradual, non-immediate causation so that *to death* is more in line with them than ϕ *dead* is. The zero complementizer here would imply too high a degree of immediacy for the main verb.

A similar explanation is applicable to the following data.

- (118) a. The judge *sentenced* him *to death*.
 b. *?The judge *sentenced* him ϕ *dead*.

Since *sentence* is a verb of non-immediate causation, there is usually a considerable time lag between the sentencing and the actual execution of the sentence. Thus a person cannot *be sentenced* ϕ *dead*; he can only *be sentenced to death*.

2.7. THE PROXIMAL "TO" AND THE DISTAL "FROM": The proximal preposition *to* often gets deleted or allows its complement to delete whereas the distal preposition

from does not. This may be cited as additional evidence for our hypothesis that proximity encourages reduction while distance discourages it. We may lead off our discussion here by considering the following data.

- (119) a. He was going (**to*) *home*.
b. He was coming back *from home*.
- (120) a. We are going (**to*) *abroad*.
b. We are coming back *from abroad*.
- (121) a. She was going (**to*) *downtown*.
b. She was coming back *from downtown*.

It is interesting that the proximal *to* gets deleted consistently while the distal *from* has to be retained. Clearly, proximity encourages reduction while distance discourages it.

The following data can be accounted for along similar lines.

- (122) a. Where is he going ((*?*)*to*)?
b. Where is he coming *from*?
- (123) a. We are going (*to the*) south.
b. We are returning *from* the south.
- (124) a. His school is near ((*?*)*to*) the Embassy.
b. His school is far *from* the Embassy.

Once again the proximal *to* allows self-deletion whereas the distal *from* disallows it. Note in this connection that “*Where are you headed?*” is much more common than “*Where are you headed for?*” Since *for* is similar to *to* in that it is also proximal, it is more often deleted than not.

The following data illustrate another interesting case of deletion associated with the proximal preposition *to*.

- (125) a. Do you have *to persuade him to come*?
b. No, I don’t have *to (persuade him to (come))*.
- (126) a. Do you have *to dissuade him from coming*?
b. No, I don’t have *to (dissuade him from coming)*.

Note here that the proximal preposition *to* allows its complement to delete whereas the distal preposition *from* does not. Note that thus “I don’t have to persuade him *to*” is a grammatical sentence while “*I don’t have to dissuade him *from*” is not. Needless to say, the following data can be accounted for in exactly the same way.

- (127) a. I don’t want to go, but I’ll have *to (go)*.
b. He doesn’t want me to smoke, but I just can’t keep *from smoking*.

Note here that “*I’ll have to go*” without *go* would make a perfect sentence while “*I just can’t keep from smoking*” without *smoking* would not.

Let us now take a look at the following interesting data.

- (128) a. In addition (*to that*), he is a fine musician.
 b. Apart *from that*, he is a fine musician.

The interesting thing here is that the proximal *to* and its complement *that* may be deleted while the distal *from* and its complement *that* may not. Note in this connection that the following data may be accounted for in a similar way.

- (129) a. *Besides (that)*, he is a fine musician.
 b. *Except for that*, he is a fine musician.

Besides is additive and thus proximal; on the other hand, *except for* is subtractive and is thus distal. Given this interpretation, we may argue that *besides* allows its complement to delete because of its proximal nature whereas *except for* does not because of its distal nature.

Finally, the following data may be adduced in support of our hypothesis.

- (130) a. John gave a book *to me*. \div John gave ϕ *me* a book.
 b. John got a book *for me*. \div John got ϕ *me* a book.
 c. I got a book *from John*. \div *I got ϕ *John* a book.

Here the indirect-object marking proximal *to* or its cousin *for* maybe deleted whereas the distal *from* may not.

3. EPILOGUE: We have amply demonstrated the validity of our basic hypothesis that proximity breeds reduction. We have also suggested that distance, i.e. the converse of proximity, breeds lengthening or non-reduction. There appears to be little doubt that relative distance in the real world translates into relative length in human language (Park (1977a), (1977b), (1980), and (1981)).

The present paper represents research of a preliminary and highly tentative nature. However, it seems to be quite clear that we have found a gold mine of sorts for linguists to work for quite some time to come. It is also our conviction that no theory of language would be complete, i.e. explanatorily adequate, if it did not account for the relationship between proximity and reduction, or conversely between distance and lengthening.

For convenience of exposition, we have distinguished between several different types of proximity in this paper. However, the line of demarcation between one type of proximity and another is often fuzzy so that there is serious doubt as to the validity of the typological distinctions made here. For one thing, psychological proximity cuts across the whole spectrum of the proximities discussed in the paper. In fact, so do temporal proximity and spatial proximity. These three types of proximity are arguably superordinate to all the other types. If this proves to be the case, then the latter types should be subsumed under the former.

Finally, some mention should be made here of collocational proximity, another

major type of proximity, which we do not discuss in any detail in this paper for lack of space. Suffice it to say that the rule for collocational proximity may be stated as: "When there is collocational proximity between two linguistic elements such that one is highly predictable in terms of the other, the predictable element can get deleted." Falling under the explanatory umbrella of this rule is the deletability of the parenthesized parts in sentences such as the following.

- (131) Wake me up *at 9 (o'clock)* in the morning.
- (132) He *craned (his neck)* to look for his boy in the crowd.
- (133) The world is awash in *crude (oil)*.
- (134) I *parked (my car)* in front of my house.
- (135) She teaches at *Harvard (University)*.
- (136) He *shrugged (his shoulders)* and left.

Collocational proximity is like the other types of proximity discussed in this paper in that it also generates an abundance of redundancy pregnant with possibilities of reduction.

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